

Abstract of the Disclosure

[0072] An echo canceler includes an adaptable filter that is updated during double-talk and far-end talk. The echo canceler receives a microphone signal that includes a near-end signal and echoes resulting from a far-end signal. The echo canceler whitens the far-end signal and decorrelates the microphone signal. The whitening and decorrelating is done as a preprocessing step for the one-unit blind source separation algorithm. A criterion of measure is used to emphasize the statistical independence of the echo canceled signal and the far-end signal. The echo cancellation problem is cast as a one-unit blind source separation problem. A one-unit blind source separation algorithm such as negentropy maximization can be used to extract the echo canceled signal.